REMARKS

Claims 23-40 are pending in the application. Drawing figure 2 is objected to because the flowchart boxes must be labeled. Claims 23 and 36 are objected to for grammar informalities. Claim 23 is rejected under 35 USC 112 as being indefinite. Claim 23 is rejected under 35 USC 101 as not being directed to statutory matter. Claims 23-40 are rejected under 35 USC 102(e) as being anticipated by Grover et al (US Pat. 6,790,680).

Claims 23-31 and 33-40 are canceled herein. Claim 32 is amended. Claims 41-48 are new. No new subject matter has been added. Claims 32 and 41-48 are presented for examination. Claims 32 and 41 are independent.

Response to drawing objection

A replacement drawing sheet 2/5 is provided with labeled boxes supported by paragraphs 40-47 of the specification. No new matter has been added.

Response to claim objections

Claims 23 and 36 are canceled, thereby rendering moot the claim objections.

Response to rejections under 35 USC 112

Claim 23 is canceled, thereby rendering moot the claim rejections under 35 USC 112.

Response to rejections under 35 USC 101

Claim 23 is canceled. New claim 41 recites a method that produces a tangible result in a technological art, environment, or machine -- selecting and implementing an optimum corrective measure to correct a failure on an industrial production line.

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Response to rejections under 35 USC 102(e)

The following features distinguish Applicant's invention from that of Grover, and are recited in amended 23 and the newly presented claims as indicated by the respective claim numbers mentioned at the end of each of the following paragraphs:

- 1) Grover requires two different failures to occur in two different tools, and only then can determine if any operating conditions were common to both tools at the time of their failures. In contrast, Applicant detects correlations among continuous process variables, and determines causes versus effects to isolate a cause of a fault. Applicant does not require two tools to fail before analysis is performed or action is taken, thus eliminating steps that were perceived to be needed in Grover. This feature is recited in independent claims 32 and 41.
- 2) Applicant's detection system is fully or partially independent of the automation process control system. On Applicant's page 2, lines 21-22: "the measuring bus system being such that it is not identical to existing bus systems used for automation". On page 17, lines 22-26: "The decoupling of the measuring and analysis devices from existing automation devices of the industrial process also allows not only a high level of freedom from retroaction when detecting measuring data but also uniform measuring data detection and analysis in the event of modifications within the industrial process." In contrast, Grover obtains all measurements from the Advanced Process Control (APC) framework that controls the industrial process (col. 5, lines 48-52). Applicant's independent measuring system has substantial advantages in avoiding feedback (termed "retroaction" in the specification), and in accuracy and timeliness, by bypassing automation control bus failures, delays, and reconfigurations. It also allows a direct comparison and analysis of process variables before and after a control bus modification. This feature is recited in independent claim 32 and dependent claim 43.
- 3) Applicant's system can follow a moving web of material being produced, such as paper or other film. Exact time stamps are added to the measured process data, and time offsets are calculated so that correlations can follow the moving web of material (page 8, line 27 to page 9, line 6). This feature is recited in dependent claim 42.
- 4) Applicant optionally provides a standard time signal via a Global Positioning System receiver (page 12, lines 30-32) connected to the independent measuring system. This feature is recited in dependent claim 44.

Conclusion

For anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. Since the claimed invention teaches features not found or inherently present in Grover, a 35 USC 102 rejection is not supported for the claims as discussed above. The remaining claims not specifically listed above are dependent on one or more of the listed claims. Therefore, Applicant respectfully requests allowance of this application

The commissioner is hereby authorized to charge any appropriate fees due in connection with this paper, including the fees specified in 37 C.F.R. §§ 1.16 (c), 1.17(a)(1) and 1.20(d), or credit any overpayments to Deposit Account No. 19-2179.

Respectfully submitted,

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Ву: ___

ohn P. Musone

Registration No. 44,961

(407) 736-6449

Siemens Corporation Intellectual Property Department 170 Wood Avenue South Iselin, New Jersey 08830